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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,710	02/19/2004	Robert Schroeder	502343	5564

53609 7590 09/02/2005

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EXAMINER

JONES, JUDSON

ART UNIT PAPER NUMBER

2834

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/782,710

Applicant(s)

SCHROEDER ET AL.

Examiner

Judson H. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-22 and 28-31 is/are allowed.
- 6) ☒ Claim(s) 1-4, 24, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 5-10, 23 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/19/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 031204.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

On page 1 paragraph 3 line 5 "Thust-tube Motors" and "Thust-tube Modules" should be "Thrust-tube Motors" and "Thrust-tube Modules."

### ***Claim Objections***

Claim 23 is objected to because of the following informalities: There is no antecedent basis for the carriage or the rail in claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohner et al. 6,316,848 B1. Rohner et al. shows in figure 9 a controller mounted on a stator comprising a thrust rod 42 with a plurality of magnets as described in column 3 line 65 and a mounting body 40 with coils 41, a motor controller 47.

In regard to claim 2, see Rohner et al. column 4 line 11.

In regard to claim 3, see Rohner et al. column 4 lines 13-17 for the control interface port and see the power cord at the top of figure 9 for the power supply line.

In regard to claim 24, see Rohner et al. column 4 lines 13-17 for the control signal input.

### ***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rohner et al. as applied to claim 1 and further in view of DeLong 4,692,673. Rohner et al. discloses the motor controller with an amplifier as described in column 4 line 26, memory as described in column 4 line 10 and position sensing electronics as described in column 3 lines 66-67 but does not disclose a transformer. DeLong teaches that it may be necessary to transform input power for a printed circuit board. Since DeLong and Rohner et al. are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a step-down transformer to lower the input and then rectify it to provide a low voltage dc power source for a processor and memory.

Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohner et al. as applied to claim 1 above, and further in view of Lindeman et al. 3,811,154. Rohner et al. discloses the motor controller but does not disclose how the printed circuit board comprising the controller is attached to the stator. Lindeman et al. teaches in figure 1 that plastic fasteners provide an inexpensive and reliable way to support a printed circuit board while allowing the board to be easily removed when necessary. Since Lindeman et al. and Rohner et al. are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a plug in type plastic fastener such as shown in Lindeman figure 1 in order to securely and removably attach a printed circuit board.

***Allowable Subject Matter***

Claims 11-22 and 28-31 are allowed.

Claims 5-10 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 23 would be allowable if the objections to the claim are overcome.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or teach a rail slidably engaging a bearing load surface of a unitary block in combination with the other features of claim 5. The prior art of record does not disclose or teach a rail including a bearing surface for a wirelessly powered thrust block where electrical power is communicated through the rail to the thrust block in combination with the other features of claim 10. The prior art of record does not disclose or teach a wireless receiver and wireless transmitter in combination with the other features of claim 25.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H. Jones whose telephone number is 571-272-2025. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Judson H. Jones 8/24/2005



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